

SNOW (S.F.)

HEADACHES FROM NASAL CAUSES.

BY

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FROM

THE MEDICAL NEWS,

July 10, 1897.

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IN this paper I do not intend to dwell to any extent on the history of individual cases but to give a sort of abstract of experience, selecting as a basis for conclusions only representative cases which have been followed up carefully, a table of which is appended. Neither will I include those headaches associated with inflammatory disease of the accessory cavities, this latter affection having been so comprehensively written up during the past three years.

In a paper on "Hemicrania"² I have called attention to pressures within the nose as a cause of sick headaches and neuralgic affections. At that time it was felt that perhaps an apology was due for venturing on a subject so nearly barren of literature. Now I am pleased to find that others both here and abroad are giving the nasal passages due credit. As early as 1886 Dr. Harrison Allen of Philadelphia published a paper on "Headaches Associated Clinically with Chronic Nasal Catarrh."³ The essay was comprehensive, replete with valuable deductions, and without doubt was the first published on the relation of headaches to intranasal conditions. In a foot-note

¹ Read before the American Laryngological, Rhinological, and Otological Society, Washington, D.C., May 1, 1897.

² *New York Medical Journal*, March 31, 1894.

³ THE MEDICAL NEWS, March 13, 1886.

he mentions a discussion touching on this subject which took place at the New York Academy of Medicine, January 21, 1886, but after his paper was written. In 1888 Dr. John O. Roe contributed a paper, entitled "The Frequent Dependence of Persistent and So-called Congestive Headaches upon Abnormal Conditions of the Nasal Passages."¹ Aside from these, and the mention made of the nose as a factor by Dr. Wharton Sinkler in an excellent article on the "Etiology and Treatment of Migrain"² I have been unable to find record of any paper relating to this subject by American writers until that produced by myself in 1893.

From all data at command, I think Dr. Hack of Freiburg (quoted by Sinkler) was the pioneer in Europe in recognizing the fact that headaches sometimes come from nasal causes. Maximilian Bresgen of Frankfurt wrote a paper on "The Headaches in Nose and Throat Diseases,"³ a copy of which he has courteously sent me. This article is very clear and concise, pointing out with detail the regions which most commonly produce headaches, and their great frequency as a symptom in nose and throat diseases. At a meeting of the British Laryngological Association, held in London, October 12, 1894, Mayo Collier reported a case of "Headache from a Diseased Middle Turbinal." Dr. J. H. McCassy of Dayton, Ohio,⁴ in connection with his experience as superintendent of the Kansas State Insane Asylum, says: "As might be expected, headache is alarmingly

¹ *Medical Record*, August 25, 1888.

² *THE MEDICAL NEWS*, July 19, 1890.

³ *Munch. Med. Woch.*, January 5, 1893.

⁴ *Cincinnati Lancet-Clinic*, September 5, 1896.

common among the insane. I am convinced that hypertrophies, vasomotor rhinitis, polypoids, deflections of the septum, catarrh of the ethmoidal, frontal, and maxillary sinuses, etc., are frequently causes of headaches, and in not a few cases of insanity."

For a number of years past the neurologist and the ophthalmologist have had full sway in the treatment of these cases. They have published many valuable books and papers and should receive due credit. One of the recent productions is Corning's on "Headaches and Neuralgia." The author does not even speak of a possible nasal cause in his classifications, though he mentions at considerable length those termed nervous, toxic, bilious, etc. Errors of refraction must, of course, be corrected, but the rhinologist should have a place in this line of work. I have selected from my records thirty cases of cephalalgia that have been referred to me as a last resort by different physicians. These patients on examination appeared to be fit subjects to work upon and treatment was instituted. They do not include those met with in any hospital or dispensary practice, or those who have been mentioned incidentally during the course of ear or throat treatment, where nasal surgery has been a prominent feature, and by means of which their headaches had been cured. In this group of thirty patients I find that seven claim to have received relief to the extent of about 40 per cent., five 75 per cent., ten 90 per cent., and eight 100 per cent. A careful review and study of their records bring out some interesting points. Sixteen were treated be-

tween 1891 and 1894, giving from three to five years in which to judge of results. Ten of these show from 90 to 100 per cent. relief of their headaches. Twenty of the thirty cases were females. The youngest was seventeen and the oldest sixty-five years of age. Sixty per cent. of the whole number were from thirty to forty years of age. Seventy per cent. of these patients appeared to have hemicrania as a result of middle turbinate pressure. Of those reported as showing 100 per cent. relief, the whole number, eight, received a full and thorough operative course. Fourteen, because of their improved condition, stopped treatment before all the visible intranasal contacts and pressures were removed. The remaining eight had a complete operative course, but owing to the sensitive condition of their membranes they are yet having some headaches, though four are found in the 90-per-cent. class. Another notable fact deduced from these thirty cases is that of the sixteen who received a full operative course, twelve report from 90 to 100 per cent. improvement. Experience with other cases not mentioned in this list teaches me that about the same ratio of improvement (75 per cent.) will hold good in all headaches from nasal causes, if each and every point of pressure or contact is thoroughly removed. Operative work on these patients is what gives quickest and most brilliant results. It should be carried out with the fact in mind that the nasal membranes are very sensitive and prone to swell, and a little more of the offending overgrowth than is necessary to absolutely relieve the pressure should be removed, though

not enough to impair the natural function of the nose.

Hajek of Vienna attributes the headaches so commonly met with after tamponing the nose and in acute coryza to a stasis. His opinion is that the veins passing through the lamina cribrosa give off one large branch to the dura mater, turn, and again enter the nasal cavities; these become engorged, press against the brain substance, and occasion severe pain. Schreck of Munich looks upon hemicrania, due to nasal and postnasal causes, as partly attributable to the hindered flow of lymph and venous blood from the brain. Dr. Robert C. Myles of New York writes me that in his opinion "vasomotor disturbances of this region or compression of the small nerves in the bony canals of the cribriform plate by the artery or vein will cause headaches under certain conditions." This theory of stasis produced by a retarded circulation, coming as it does from three eminent and independent sources, should receive consideration. Perhaps it will explain why some twenty-five per cent. of our patients have an occasional return of their trouble after all visible pressures and contacts have been removed. According to some neurologists, it may be due to the fact that "all influences exerted upon the human body are to a greater or lesser degree cumulative, and the phenomena following these are proportionate to the response yielded by the receiving nerve-centers." Personally, I think that most of these recurring attacks are produced by the irritable and sensitive condition of the membranes, which favor congestion with resulting pressure on sensitive areas.

In those cases of headaches from nasal causes which have come under my observation, but two can be recalled in which the patients at the time of their seizures did not show some point or points of contact within the nasal fossæ. Their relapses may be due to stasis as mentioned above. It has been noticed that they as well as others are kept very comfortable if weekly or biweekly stimulating applications be made in order to keep the relaxed and sensitive membranes in proper tone. The treatment that appears to act best in producing this result is a gentle spraying of the parts with iodole and ether, the patient being instructed to breathe through the nostrils quickly if the application produces too much smarting pain. Three grains to the ounce of this mixture is a good strength for these tonic treatments, and the same combination, preceded if necessary by a two-per-cent. cocain spray to allay smarting, is very efficacious in reducing acute or subacute nasal and postnasal inflammation. In fact, it is good in temporary turgescence from any and all causes.

Without doubt some cases of migrain are of the nature of "nerve storms" and are closely allied to epilepsy, but it appears very probable that these nerve storms are primarily brought about by some irritation of a nerve filament, such as is produced by contact of the inner surface of the middle turbinate body with the septum.

My paper on "Hemicrania," written in 1893, contained the proposition that there are a certain number of headaches which can be cured, or at least relieved, by the proper treatment of pressures or

contacts within the nose. Added experience during the past four years, together with the observations of other workers, has amplified this idea until it surely appears that we are safe in advising those who come to us with a history of persistent or recurring neuralgia, clavus, sick headache, pressure on top of the head, or the deep frontal pain commonly termed catarrhal headache, to have their nasal and post-nasal passages put in the best possible condition. I am about ready to believe that from 70 to 80 per cent. of all cases of headaches of hemicranial order are due to removable causes located within the nasal passages or adjacent air spaces.

As intimated above, the treatment *par excellence* for these obstinate cases in which we find evidence of nasal disease of whatever nature is the correction of that disease by the means indicated. If we have reason to think that the trouble comes from the accessory sinuses these must be drained. If the space between the septum and a middle turbinated body is too narrow, or if this same body is overgrown anteriorly or presses against the outer wall of the nose, preventing free access of air into or drainage of the sinuses, it must be reduced in some manner. If bony shelves, membranous or cartilaginous thickenings causing pressure are found, these should be taken care of. In some cases one fails to find any of these deformities, and perhaps at the time of examination there are no points of contact, but it will be noticed that the membranes are of a peculiar bluish-red color, and have a sensitive or relaxed appearance which is an indication that within the next half hour there may be some localized spot of pressure. This condition

does not require operative interference, but will usually respond to persistent and stimulating treatment, together with proper regulation of the habits, manner of living, exercise, etc., and, according to Roe, if the patient resides in the Lake region, avoiding too great a quantity of night air in the sleeping apartment.

One word further, regarding those patients suffering from an attack of headache, who ask for temporary relief. Inspection of their nasal passages will perhaps show marked pressures in the olfactory region, which may be due to an acute or subacute inflammation without much chronic disease, and without osseous deformity or overgrowth. About ninety per cent. of these patients can be relieved in one or a few treatments by cleansing the nostrils, and using the iodole and ether mixture, preceded by a light two per cent. cocain spray, as described above. Sometimes this will have to be repeated in four or five hours, but one treatment usually breaks up an attack. Cases number 22 and 27 in the appended table well represent this class.

The desire to be brief has hindered me from quoting other authors, who have written on headaches, and forced me to leave out many things that I would have liked to mention; still I hope that proof enough has been brought forward to cause the rhinologist to take a more active interest in reflex headaches.

No.	Name.	Age.	Began treatment.	Relieved.	Intranasal conditions.	Remarks.
				Per cent.		
1.	Mrs. K.	32	April 16, 1892	40	Deep bony shelf pressing into r. mid. turb.	Severe sick headache each week.
2.	Miss J.	32	Aug. 18, 1892	40	Enlarged mid. turb.	Bimonthly sick headache.
3.	Mrs. F.	45	Nov. 5, 1892	75	Enlarged mid. turb.	Bimonthly hemicrania.
4.	Mrs. L.	35	Dec. 3, 1892	40	Septal shelf pressing inf. turb.	Severe hemicrania at times each week.
5.	Miss H.	25	Oct. 7, 1892	100	Septal shelf pressing inf. turb.	Frequent hemicrania.
6.	Mr. K.	56	April 14, 1892	100	Enlarged mid. turb. with thickened membranes.	Severe hemicrania tri-monthly.
7.	Mrs. Y.	55	Feb. 23, 1892	100	Septal shelf and deflected septum.	Clavus and general headaches.
8.	Dr. S.	30	Mar. 23, 1892	90	Deflected septum pressing r. mid. turb.	Hemicrania once a week.
9.	Miss G.	32	May 9, 1892	90	Deflected septum, large shelf, and mid. turb.	Severe hemicrania. Died of general tuberculosis in 1895.
10.	Miss F.	25	Nov. 17, 1892	75	Deflected septum, large shelf, etc.	Severe hemicrania, when she has colds.
11.	Mrs. C.	35	Jan. 17, 1893	75	Enlarged mid. turb.	Severe weekly hemicrania, pressure on top of head.
12.	Mrs. R.	50	Oct. 26, 1893	90	Atrophic rhinitis, enlarged turb.	Persistent general headaches almost constant.

No.	Name.	Age.	Began treatment.	Relieved.	Intranasal conditions.	Remarks.
13.	Miss C.	17	June 24, 1893	Per cent. 90	Enlarged mid. turb.	Headaches and pressure top of head bi-monthly.
14.	Mr. C.	38	May 18, 1893	100	Septal shelf and thickened mid. turb.	General headaches.
15.	Miss B.	19	Mar. 23, 1893	100	Septal shelf and swollen mid. turb.	Severe sick headache bi-monthly.
16.	Mr. M.	36	April 20, 1893	100	Septal shelf and swollen mid. turb.	Severe sick headaches bi-monthly.
17.	Mr. S.	38	May 21, 1894	40	Long shelf pressing into mid. turb., etc. week.	Severe hemi-crania once a week.
18.	Miss R.	26	June 27, 1894	75	Deflected septum, mid. turb., filling infundibula, r. s.	Hemicrania bimonthly.
19.	Prof. K.	36	Jan. 17, 1894	75	Thick membrane and enlarged turb.	Severe and frequent hemi-crania.
20.	Dr. L.	27	Dec. 29, 1894	90	Cartilagenous thickening, pressing mid. turb., l. s.	Severe frontal headaches, tri-monthly.
21.	Miss S.	65	April 18, 1894	90	Deflected septum pressing l. mid. turb.	General headaches.
22.	Mrs. B.	33	May 11, 1894	90	Thickened membrane on mid. turb. and septum.	Frequent headaches.
23.	Miss W.	33	Nov. 2, 1894	90	Mid. turb. pressure on septum.	Neuralgia and severe headache.

No.	Name.	Age.	Began treatment.	Relieved.	Intranasal conditions.	Remarks.
				Per cent.		
24.	Mrs. H.	32	Jan. 7, 1894	100	Mid. turb. pressure on septum, filling infundibula.	Very frequent, severe sick headaches.
25.	Mr. C.	35	June 4, 1895	90	Thickenings and enlarged mid. turb.	Severe neuralgia, and hemicrania.
26.	Mr. N.	28	Feb. 6, 1896	40	Septal shelf, and thickened membranes.	Catarrhal headaches.
27.	Mrs. L.	40	Oct. 1, 1896	40	Swollen and sensitive membranes over mid. turb.	Severe hemicrania, when she has cold.
28.	Dr. B.	40	Oct. 10, 1896	100	Septal shelf, and sensitive membranes.	Frequent general headaches.
29.	Mrs. T.	37	Nov. 5, 1896	90	Enlarged mid. turb.	Very severe, sick headaches twice a week.
30.	Mr. S.	45	Oct. 2, 1896	40	Enlarged mid. turb., and polypoid membranes.	Hemicrania twice a week.

The Medical News.

Established in 1843.

A WEEKLY MEDICAL NEWSPAPER.

Subscription, \$4.00 per Annum.

The American Journal
OF THE
Medical Sciences.

Established in 1820.

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